IT IS CLAIMED:

1. A coiled-coil polypeptide composition, comprising a template of the form $(ab_ic_id e_i f_i g_i)_n$, where n is at least three, a and d are amino acids selected from the group consisting of leucine, isoleucine, valine, phenylalanine, methionine, tyrosine, and derivatives thereof, and the sequence formed by the positions $(b_ic_ie_if_ig_i)_n$ is a sequence of amino acids from a solvent-accessible region of an epitope from a selected protein.

2. The composition of claim 1, wherein a is isoleucine and d is leucine.

3. The composition of claim 1, wherein the coiled-coil polypeptide is comprised of two polypeptide chains arranged in a parallel configuration.

4. The composition of claim 1, wherein n is between about 3 and about 20.

5. The composition of claim 1, wherein n is between about 5 and about 10.

6. The composition of claim 1, wherein the epitopes are selected from α-helical surface regions of cellular prion protein.

7. The composition of claim 1, wherein the epitopes are selected from exposed surface regions of infectious prion protein.

8. The composition of claim 6, wherein the sequence formed by the positions $(b_ic_ie_if_ig_i)_n$ corresponds to the solvent-accessible residues of an epitope having a sequence selected from the group consisting of SEQ ID NO:5, SEQ ID NO:6, and SEQ ID

NO:7.

9. The composition of claim 6, wherein the cellular prion protein is selected from the group consisting of mouse, hamster, bovine, ovine and human cellular prion protein.

10. A method for stabilizing and displaying an epitope in a synthetic polypeptide, comprising

preparing a coiled-coil polypeptide comprised of a template of the form $(ab_ic_ide_if_ig_i)_n$, where n is at least three, a and d are amino acids selected from leucine, isoleucine, valine, phenylalanine, methionine, tyrosine, and derivatives thereof, and the sequence formed by the positions $(b_ic_ie_if_ig_i)_n$ is a sequence of amino acids from a solvent-accessible region of an epitope from a selected protein.

11. The method of claim 10, wherein said preparing includes preparing said polypeptide comprised of a template where a is isoleucine and d is leucine.

12. The method of claim 10, wherein said preparing includes preparing at least two polypeptide chains comprised of the same epitope.

13. The method of claim 10, wherein said preparing includes preparing said polypeptide comprised of an epitope selected from α-helical surface regions of cellular prion protein.

14. The method of claim 13, wherein said cellular prion protein is selected from the group consisting of mouse, hamster, bovine, ovine and human cellular prion protein.

15. The method of claim 13, wherein the sequence formed by the positions $(b_ic_ie_if_ig_i)_n$ is derived from the solvent-accessible residues of an epitope having a sequence selected from the group

consisting of SEQ ID NO:5, SEQ ID NO:6, and SEQ ID NO:7.

16. The method of claim 10, wherein said preparing includes preparing said polypeptide comprised of an epitope selected from solvent-accessible regions of infectious prion protein.

17. A method for preparing antibodies specific to a selected epitope from a selected protein, comprising

preparing a coiled-coil polypeptide comprised of a template of the form $(ab_ic_id e_i f_i g_i)_n$, where n is at least three, a and d are amino acids selected from the group consisting of leucine, isoleucine, valine, phenylalanine, methionine, tyrosine, and derivatives thereof, and the sequence formed by the positions $(b_ic_ie_if_ig_i)_n$ is a sequence of amino acids from a solvent-accessible region of an epitope from a selected protein.

18. The method of claim 17, wherein said preparing includes preparing said polypeptide comprised of a template where a is isoleucine and d is leucine.

19. The method of claim 17, wherein said preparing includes preparing said polypeptide comprised of an epitope selected from α-helical surface regions of cellular prion protein.

20. The method of claim 17, wherein said preparing includes preparing said polypeptide comprised of an epitope selected from exposed surface regions of infectious prion protein.